UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,605	07/11/2003	Larry Pearlstein	HA-59APPCON	2905

26479 7590 01/30/2008		EXAMINER
STRAUB & POKOTYLO		VO, TUNG T
620 TINTON AVENUE		
BLDG. B, 2ND FLOOR		ART UNIT / PAPER NUMBER
TINTON FALLS, NJ 07724		2621

MAIL DATE	DELIVERY MODE
01/30/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/617,605	PEARLSTEIN, LARRY
	Examiner	Art Unit	
	Tung Vo	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>03</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>04 December 2007</u>.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>23-39</u> is/are pending in the application.

    4a) Of the above claim(s) <u>1-22</u> is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>23-39</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

1.   Claims 23-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over De With et

al. (US 5,530,481) in view of Keesman et al. (US 5,805,224).

Re claims 23 and 28, De With discloses a video processing device (fig. 2) for carrying

out a video processing method comprising the steps of:

receiving encoded video data representing a series of images (2 and 30 of fig. 2; the

demultiplexer receives the encoded video data), said encoded video data having been encoded

using motion compensated prediction (19 or 32 of fig. 2, the same motion compensation is used

in the encoder and decoder, see also fig. 2) on at least some of the images being encoded (14 of

fig. 2), each encoded image in said series of images including

a first contiguous image area and a second contiguous image area (figs. 6A-6D; 150 and

160 of fig. 5, wherein in the contiguous blocks or areas are stored in the register (150)

corresponding to the coordinates (col. 4, lines 27-40), this disclosure would suggest the first

contiguous image area and second contiguous area are predetermined),

each of said first and second contiguous image areas being smaller than a full area of an

image in said series of images (Col. 4, line 40-col. 5, line20), motion vectors for the first

predetermined contiguous image areas using for predictions only pixels within first

predetermined contiguous image areas (fig. 6B; col. 4, lines 58-67), said first contiguous image

areas being located at the same location in each of said series of images (figs. 6A and 6B);

said same location having been determined prior to encoding (140 of fig. 5, determining

circuit receives block coordinates to be encoded; col. 4, lines 10-18); and

a decoder (30-36 of fig. 2) for decoding said received encoded video data.

It is noted that De With et al. does not particularly teach the predetermined contiguous

image areas.

However, Keesman teaches the predetermined contiguous image areas (col. 1, lines 15-

21) wherein the predetermined number of contiguous blocks (areas) are prior encoding (1 of fig.

1). Therefore, taking the teachings of De With et al. and Keesman as a whole, it would have

been obvious to one of ordinary skill in the art to modify the teachings of Keesman into the

method of De With et al. allowing to reduce actually the complexity of the conventional ones.

Re claims 24, 29, De With further discloses a display for displaying images

corresponding to the decoded received encoded video data (fig. 4, Note FIG. 4 shows a scanning

sequence which has been found to be useful for video recorders because it yields an acceptable

picture quality upon fast display, this suggests that the system inherently has a display).

Re claim 25, De With further discloses wherein the received encoded image data further

includes motion vectors for the second contiguous image areas, the motion vectors for the second

contiguous image area using for predictions only pixels within second contiguous image areas of

said series of images (fig. 6C, col. 5, lines 1-10).

Re claim 26, De With further discloses wherein the encoded image data includes information identifying areas of the images in said series of images to which motion compensated prediction was separately applied (fig. 6B and 6C)

Re claim 27, De With further discloses wherein said at least one image is a frame (fig. 2).

Re claim 30, De With discloses a method (fig. 2) of processing video data comprising the steps of: receiving encoded video data representing a series of images (2 and 20 of fig. 2, Note demultiplexer receives a compressed or encoded signals that comprises a series of images or pictures), said encoded video data having been encoded using motion compensated prediction on at least some of the images being encoded (19 of fig. 2), each image including first and second contiguous image areas (figs. 6A-6D), said first and second image areas being in the same location in each image in the series of images (col. 3, lines 13-18), motion vectors (col. 3, lines 16-18) for the first image areas (fig. 6A) using for predictions only pixels of first image areas (col. 3, lines 29-38), encoded image data (14 of fig. 2, Noted coding a second image area based on the prediction) corresponding to a second image area of at least one of said images including insert image data (17 of fig. 2, Note image data is added to the encoded video data) that was added to said encoded video data after initial encoding of said at least one of said images (16 and 17 of fig. 2); and decoding said received encoded video data (30-36 of fig. 2).

Re claim 31, De With further discloses displaying images corresponding to the decoded received encoded video data (fig. 4).

Re claim 32, De With further discloses wherein the encoded image data includes information identifying areas of the images in said series of images to which motion compensated predictions were separately applied (figs. 6A-6D).

Re claim 33, De With further discloses wherein each image in said series of images is a frame (fig. 2).

1.   Claims 34-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xia et al. (US 6,014,466) in view of Zhu et al (.

Re claim 34, Xia discloses a method of processing video data (fig. 11) comprising the steps of: receiving encoded video (MPEG-2 encoder for encoding first and second frame) data representing a second image that was encoded as a function of a first image (112 of fig. 11, see also fig. 12, Note encoding video signal based on frame to frame), the first and second images each including a first and a second non-overlapping image segments (104 of fig. 11, Note there each image is segmented into object; 62 and 64 of fig. 7, see also fig. 3), each of the first and second non-overlapping image segments including a plurality of vertically contiguous pixels (col. 1, lines 14-23), the first non-overlapping image segment (object 38 of fig. 3) occurring in the same location in each of the first and second images (MPEG-2 encoding an image data based on the comparison of the first and second images, wherein the object 38 segment is the same location in both images by motion compensation (126 of fig. 12), Before the object can be encoded, its frame-to-frame motion must be compensated for (step 126 of fig. 12)), the location of said first non-overlapping image segment being determined (col. 4, lines 11-15, steps 62-76 of fig. 7, the determined location of said first non-overlapping (62-76) before encoding (78-83 of fig. 7)) prior to encoding of the first and second images (Frame to Frame motion compensation, 126 of fig. 12), said encoded video data representing the second image using as reference data from the first image, only image data (figs. 8 and 9) corresponding to the first image segment

(fig. 5) of the first image (34 of fig. 3), for motion vectors (126 of fig. 12) representing a portion

of the first image segment of the second image and using as reference data from the first image

(126 and 128 of fig. 12),

image data corresponding to the second image segment of the first image (col. 12, lines 34-43),

for motion vectors representing a portion of the second image segment of the second image (126

of fig. 12); and decoding said received encoded video data (114 of fig. 11).

Re claim 35, Xia further discloses displaying the decoded video data (118 of fig. 11)

Re claim 36, Xia further discloses wherein the received encoded video data representing

the second image was also encoded as a function of a third image in addition to the first image,

the received encoded video data using as reference data from the third image, only image data

corresponding to a first image segment of the third image, for motion vectors representing a

portion of the first image segment of the second image (fig. 12).

Re claim 37, Xia further discloses wherein said received encoded video data further uses

as reference data from the third image, image data corresponding to the second image segment of

the third image, for motion vectors representing a portion of the second image segment of the

second image (MPEG-2 encoder, fig. 12)

Re claim 38, Xia further discloses wherein the first and second image regions of the

second image represented by the received encoded image data were encoded using independent

non-overlapping sets of reference data for motion compensated prediction purposes, said

received encoded image data including information identifying each of the image segments

which is independently encoded using motion compensated prediction techniques (114 of fig.

11)

Re claim 39, Xia further discloses wherein said first and second images are frames (frame to frame encoding, fig. 12).

Conclusion

2.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.
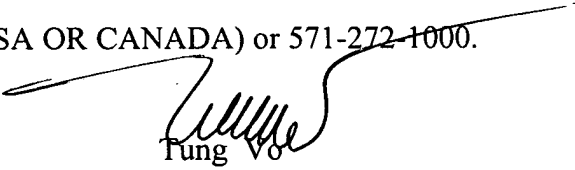
Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung Vo whose telephone number is 571-272-7340. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tung Vo
Primary Examiner
Art Unit 2621